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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,295	08/20/2003	Sanjay Gupta	END920030025	6666

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EXAMINER

RAYYAN, SUSAN F

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,295

Applicant(s)

GUPTA, SANJAY

Examiner

Susan F. Rayyan

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-25 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7,10-13,17-18,20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shakib et al (US 5,752,025) and Yoshiyama et al (US 2002/0120617).**

As per claim 1 Shakib teaches:

sorting and categorizing a first set of columns within a view of the database at col.3, lines 65, bridging to, col.4, line 3.

Shakib does not explicitly teach marking a second set of columns within the view as if the second set of columns were already sorted and categorized prior to actual sorting and categorizing of the second set of columns, the second set of columns including all columns exclusive of the first set of columns. Yoshiyama does teach this limitation at parg. 35 lines 6-15. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to speed up data retrieval at parg.10.

As per claim 2 same as claim arguments above and Yoshiyama teaches:
further comprising the step of sorting and categorizing at least one column of the
second set of columns in response to performing a query on the at least one column at
parg. 35, lines 10-12.

As per claim 3 same as claim arguments above and Yoshiyama teaches:
including establishing a mini-index indexing the at least one column of the second set of
columns at parg. 46, lines 11-17.

As per claim 4 same as claim arguments above and Yoshiyama teaches:
including accessing the mini-index to provide increased performance at parg. 46, lines
11-17.

As per claim 5 same as claim arguments above and
including monitoring parameters of the mini-index, and as a result, performing one of
deleting, updating, and recreating the mini-index at parg. 46, lines 11-17.

As per claim 6 same as claim arguments above and Yoshiyama teaches:
wherein the parameters include at least one of a number of sorted columns, a number
of categorized columns, a number of records that can be accessed in a view, an
average number of records per category, and an average number of records per

hierarchy at parg. 46, lines 15-17.

Claims 7, 10-13, 17-18,20-25 are rejected under the same rationale as stated in claims 1-6 arguments.

4. Claims 8-9,14-16,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shakib et al (US 5,752,025) and Yoshiyama et al (US 2002/0120617) and further in view of Wilkes et al (US 2003,0088739).

As per claim 8 same as claim arguments above and Shakib and Yoshiyama do not explicitly teach ... assigning the first set of columns to a portion of a cache. Wilkes does teach this limitation at parg. 62, 64 and fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to improve the rate at which the insertion point in the cache metadata structure may be found at parg. 65, lines 1-3.

As per claim 9 same as claim arguments above and Shakib and Yoshiyama do not explicitly teach ... in another portion of the cache. Wilkes does teach this limitation at parg. 62, 64 and fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to improve the rate at which the insertion point in the cache metadata structure may be found at parg. 65, lines 1-3.

As per claim 14 same as claim arguments above and Shakib and Yoshiyama do not explicitly teach ... including maintaining the first set of columns in a portion of cache. Wilkes does teach this limitation at parg. 62, 64 and fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to improve the rate at which the insertion point in the cache metadata structure may be found at parg. 65.

As per claim 15 same as claim arguments above and Shakib and Yoshiyama do not explicitly teach ...including maintaining the at least one column of the second set of columns in another portion of cache. Wilkes does teach this limitation at parg. 62, 64 and fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to improve the rate at which the insertion point in the cache metadata structure may be found at parg. 65, lines 1-3.

As per claim 16 same as claim arguments above and Shakib and Yoshiyama do not explicitly teach ... further including sizing the another portion of cache depending on the size of the at least one column of the second set of columns. Wilkes does teach this limitation at parg. 62, 64 and fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to improve the rate at which the insertion point in the cache metadata structure may be found at parg. 65, lines 1-3.

As per claim 19 same as claim arguments above and Shakib and Yoshiyama do not explicitly teach ...including a component to sort and categorize the at least one column of the second set in a portion of a cache and assign the first set of columns to another portion of the cache. Wilkes does teach this limitation at parg. 62, 64 and fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to improve the rate at which the insertion point in the cache metadata structure may be found at parg. 65, lines 1-3.

Contact Information

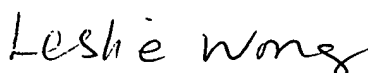
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Rayyan whose telephone number is (571) 272-1675. The examiner can normally be reached M-F: 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan Rayyan

February 6, 2006


Primary Examiner